



Figure IV-3-4. Ebb shoal, East Pass, Florida (23 Sep 1987). The clear water reveals two-dimensional dunes on the ebb shield. Water depth at the edge of the shoal is 3-4 m. North is to the top of the image. Distance from left to right is about 1 km (photograph of USAED, Mobile)

- (1) Distributary channels.
- (2) River-mouth bars.
- (3) Interdistributary bays.
- (4) Tidal flats.
- (5) Tidal ridges.
- (6) Beaches.
- (7) Beach ridges.
- (8) Dunes and dune fields.
- (9) Swamps and marshes.

Despite the pronounced variety of worldwide environments where deltas are found, all actively-forming deltas have at least one common attribute: a river supplies clastic sediments to the coast and inner shelf more rapidly than marine processes can remove these materials. Whether a river is sufficiently large to transport enough sediment to overcome erosive marine processes depends upon the climate, geology, and nature of the drainage basin, and, most important, the overall size of the basin. The following paragraphs discuss delta classification, riverine flow, sediment deposition, and geomorphic structures associated with deltas.